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REMARKS

Claims 1, 3 and 5-8, as amended, remain herein. Claim 2 remains herein but is presently withdrawn from consideration.

Claim 1 has been amended to recite the subject matter of claim 4, and claim 4 has been cancelled without prejudice or disclaimer. Claim 1 also has been amended to recite the inner shell having inside and outside surfaces both without a surface pattern for generating splinters. See applicants' specification, page 4, lines 13-14.

1. Claims 1, 3, 5 and 6 were rejected under 35 U.S.C. §102(b) over Dixon U.S. Patent 3,820,464.

The presently claimed explosive ammunition includes (1) an inner shell having inside and outside surfaces both without a surface pattern for generating splinters, said inner shell being for splinter generation, (2) an explosive charge substantially surrounded by the inner shell, (3) an outer plastic case enclosing the inner shell, and (4) netting located between the outside surface of said inner shell and the outer case. This

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arrangement is nowhere disclosed or suggested in the cited reference.

The Office Action cites Dixon '464 as allegedly disclosing an explosive fragment projectile including explosive charge 20, shell 16, shell 22, netting 38, and outer casing 26. Dixon '464, column 2, line 37 to column 3, line 7, describes explosive 20 located inside inner fragmenting cylinder 16; a first movable fragmenting cylinder 22 fitting snugly but rotatably around the inner fragmenting cylinder 16; a second movable fragmenting cylinder 26 fitting snugly but rotatably around the first movable fragmenting cylinder 22; and the inside surface of each of fragmentation cylinders 16, 22 and 26 has a failure grid pattern 38 thereon, where upon detonation, all fragmentation cylinders 16, 22 and 26 rupture to produce splinters.

In contrast, the presently claimed explosive ammunition includes only a single internal fragmenting shell that does not have a fragmenting pattern thereon. Dixon '464, column 2, lines 65-67, discloses an innermost fragmenting shell enclosing the explosive charge, wherein such shell has fragmentation scoring on its inner surface. Thus, Dixon '464 differs from applicants'

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explosive ammunition because Dixon '464 does not disclose a fragmenting shell enclosing an explosive charge, wherein such innermost shell does not have a surface pattern for generating splinters, as recited in applicants' claim 1.

Moreover, the presently claimed explosive ammunition includes an outer plastic case enclosing the inner shell. Dixon '464, discloses three fragmenting cylinders without any additional enclosing case, and does not disclose an outer plastic case, contrary to applicants' claim 1.

For the foregoing reasons, Dixon '464 fails to disclose all elements of applicants' claimed invention, and therefore is not a proper basis for rejection under §102. And, there is no disclosure or teaching in Dixon '464 that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicants' presently claimed invention. Claims 3, 5 and 6, which depend from claim 1, are allowable for the same reasons explained herein for claim 1. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

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2. Claim 4 was rejected under 35 U.S.C. §103(a) over Dixon '464 and Hammer U.S. Patent 5,979,332. Claim 4 has been cancelled, thereby mooting its rejection. Claim 1 has been amended to recite the subject matter of claim 4.

This rejection is respectfully traversed on the grounds that the combination of Dixon '464 and Hammer '332 would result in impermissible re-design of the Dixon '464 structure (Ex parte Jackson, 146 USPQ 409 (BdPatApp&Int 1965) (Claims are not rejected as unobvious over primary reference in view of secondary reference where to so modify device of primary reference would destroy its structural identity and mode of operation). Additionally, there is no basis found within Hammer '332 which suggests or provides a motivation for combining the teachings therein. Ecolochem, Inc. v South California Edison Company, CAFC 99/1043, 9/7/2000.

The Office Action argues that the Dixon '464 projectile could be made lightweight by substituting the plastic case of Hammer '332 for the outer fragmenting cylinder 26 of Dixon '464. Dixon '464 discloses outermost fragmenting cylinder 26 having scoring, and which is not a simple packaging case. Dixon '464

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discloses three fragmenting cylinders 15, 22 and 26 with specific structural relationships between them including cylinder-cylinder fit and surface features, and does not disclose or suggest that only two such cylinders would be appropriate. A person skilled in the art would not replace the outermost fragmenting cylinder 26 of Dixon '464 with the mere plastic case taught by Hammer '332 because that would necessarily change the structure and purpose of the projectile disclosed by Dixon '464. Therefore, contrary to the Office Action, there is no basis for substituting the outermost fragmenting cylinder with a mere plastic case taught by Hammer '332 to make the projectile lightweight. To do so would impermissibly change the structure and purpose of the projectile disclosed by Dixon '464.

For the foregoing reasons, neither Dixon '464 nor Hammer '332 contains any teaching, suggestion, reason, motivation or incentive that would have led one of ordinary skill in the art to applicants' claimed invention. Nor is there any disclosure or teaching in either of these references that would have suggested the desirability of combining any portions thereof

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effectively to anticipate or suggest applicants' presently claimed invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

3. Claim 7 was rejected under 35 U.S.C. §103(a) over Dixon '464 and Lips U.S. Patent 5,131,329.

Claim 7, which depends from claim 1, is allowable for the same reasons as claim 1, as explained herein.

Moreover, the Office Action admits that Dixon '464 does not disclose the specific material of each fragmentation shell and cites Lips '329 as allegedly teaching same. However, Lips '329 does not fulfill the deficiencies of Dixon '464, as explained herein.

4. Claim 8 was rejected under 35 U.S.C. §103(a) over Dixon '464.

Claim 8, which depends from claim 1, is allowable for the same reasons as claim 1, as explained herein.

For the foregoing reasons, Dixon '464 does not contain any teaching, suggestion, reason, motivation or incentive that would

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have led one of ordinary skill in the art to applicants' claimed invention. Nor is there any disclosure or teaching in Dixon '464 that would have suggested the desirability of modifying any portions thereof to anticipate or suggest applicants' presently claimed invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

All claims 1, 3 and 5-8 are now proper in form and patentably distinguished over all grounds of rejection stated in the Office Action. Accordingly, allowance of all claims 1, 3 and 5-8 is respectfully requested.


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Should the Examiner deem that any further action by the applicants would be desirable to place this application in even better condition for issue, the Examiner is requested to telephone applicants' undersigned representatives.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

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Date

  
Roger W. Parkhurst  
Registration No. 25,177  
Robert N. Wieland  
Registration No. 40,225

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PARKHURST & WENDEL, L.L.P.  
1421 Prince Street, Suite 210  
Alexandria, Virginia 22314-2805  
Telephone: (703) 739-0220